

WHAT IS CLAIMED IS:

1 1. An advertisement targeting process for determining the advertisement preferences of
2 a user, comprising:

- 3 a query monitoring process for monitoring queries entered by users;
4 a query association process for associating each said monitored query with
5 one or more predefined advertisement categories; and
6 a preference file maintenance process for maintaining, for each said user, an
7 advertisement preference file that specifies said predefined advertisement categories
8 associated with each said monitored query entered by said user, thus generating a list
9 of user-preferred advertisement categories.

1 2. The advertisement targeting process of claim 1 wherein said preference file
2 maintenance process includes a status determination process for determining if an
3 advertisement preference file exists for said user.

1 3. The advertisement targeting process of claim 2 wherein said preference file
2 maintenance process includes a preference file creation process, responsive to said status
3 determination process, for creating said advertisement preference file for said user if it is
4 determined that an advertisement preference file does not exist for that user.

1 4. The advertisement targeting process of claim 3 wherein said preference file
2 maintenance process includes a user identification process, responsive to said preference file
3 creation process creating said advertisement preference file for said user, for transmitting to
4 said user a unique identifier that associates said user with the appropriate advertisement
5 preference file.

1 5. The advertisement targeting process of claim 4 wherein said unique identifier is a
2 cookie that is stored on a remote computer operated by said user.

1 6. The advertisement targeting process of claim 2 wherein said preference file
2 maintenance process includes a preference file modification process for modifying said list of

3 user-preferred advertisement categories to include said predefined advertisement categories
4 associated with each said monitored query entered by said user.

1 7. The advertisement targeting process of claim 1 further including a query storage
2 process for storing said monitored queries in said advertisement preference file for later
3 processing by said query association process.

1 8. The advertisement targeting process of claim 1 further including an advertisement
2 repository for storing a plurality of advertisements grouped in accordance with said
3 predefined advertisement categories.

1 9. The advertisement targeting process of claim 8 further including an advertisement
2 transmission process for accessing said plurality of advertisements stored on said
3 advertisement repository and transmitting, to said user, advertisements in accordance with
4 said list of user-preferred advertisement categories specified in said advertisement preference
5 file for that user.

1 10. The advertisement targeting process of claim 9 wherein said advertisement repository
2 and said advertisement transmission process are incorporated into a remote advertisement
3 service process.

1 11. The advertisement targeting process of claim 9 wherein said advertisements
2 transmitted to said user are received by a remote computer operated by said user, wherein
3 said remote computer executes a graphical program that allows said user to view said
4 advertisements.

1 12. The advertisement targeting process of claim 11 wherein said graphical program is a
2 web browser.

1 13. The advertisement targeting process of claim 9 wherein said advertisements
2 transmitted to said user are received by a remote computer operated by said user, wherein

3 said remote computer executes an audio program that allows said user to hear said
4 advertisements.

1 14. The advertisement targeting process of claim 1 wherein said query association
2 process includes a query parsing process for separating said query into one or more discrete
3 chunks.

1 15. The advertisement targeting process of claim 14 wherein said query association
2 process includes a word association process for associating one of said predefined
3 advertisement categories with one or more of said discrete chunks included in said query.

1 16. The advertisement targeting process of claim 14 wherein said query association
2 process includes a word categorization process for categorizing one or more of said discrete
3 chunks included in said query into one of said predefined advertisement categories if it
4 determined that said one or more discrete chunks is not currently associated with any of said
5 predefined advertisement categories.

1 17. The advertisement targeting process of claim 16 wherein said query association
2 process includes a word recategorization process for recategorizing one or more of said
3 discrete chunks included in said query into a different predefined advertisement category if it
4 is determined that the existing association of said one or more discrete chunks with its
5 predefined advertisement category is no longer valid due to changes in the user's query
6 patterns.

1 18. The advertisement targeting process of claim 15 wherein said word association
2 process is a manual association process.

1 19. An advertisement targeting process for determining the advertisement preferences of
2 a user, comprising:

3 a query monitoring process for monitoring queries entered by users;

4 a query storage process for storing said monitored queries in an advertisement
5 preference file for that said user;

6 a query association process for associating each said monitored query stored
7 in said advertisement preference file with one or more predefined advertisement
8 categories;

9 a preference file maintenance process for maintaining, for each said user, said
10 advertisement preference file so that it specifies said predefined advertisement
11 categories associated with each said monitored query entered by said user, thus
12 generating a list of user-preferred advertisement categories.

1 20. The advertisement targeting process of claim 19 wherein said preference file
2 maintenance process includes a status determination process for determining if an
3 advertisement preference file exists for said user.

1 21. The advertisement targeting process of claim 20 wherein said preference file
2 maintenance process includes a preference file creation process, responsive to said status
3 determination process, for creating said advertisement preference file for said user if it is
4 determined that an advertisement preference file does not exist for that user.

1 22. The advertisement targeting process of claim 21 wherein said preference file
2 maintenance process includes a user identification process, responsive to said preference file
3 creation process creating said advertisement preference file for said user, for transmitting to
4 said user a unique identifier that associates said user with the appropriate advertisement
5 preference file.

1 23. The advertisement targeting process of claim 22 wherein said unique identifier is a
2 cookie that is stored on a remote computer operated by said user.

1 24. The advertisement targeting process of claim 20 wherein said preference file
2 maintenance process includes a preference file modification process for modifying said list of
3 user-preferred advertisement categories to include said predefined advertisement categories
4 associated with each said monitored query entered by said user.

1 25. The advertisement targeting process of claim 19 further including an advertisement
2 repository for storing a plurality of advertisements grouped in accordance with said
3 predefined advertisement categories.

1 26. The advertisement targeting process of claim 25 further including an advertisement
2 transmission process for accessing said plurality of advertisements stored on said
3 advertisement repository and transmitting, to said user, advertisements in accordance with
4 said list of user-preferred advertisement categories specified in said advertisement preference
5 file for that user.

1 27. The advertisement targeting process of claim 26 wherein said advertisement
2 repository and said advertisement transmission process are incorporated into a remote
3 advertisement service provider.

1 28. The advertisement targeting process of claim 26 wherein said advertisements
2 transmitted to said user are received by a remote computer operated by said user, wherein
3 said remote computer executes a graphical program that allows said user to view said
4 advertisements.

1 29. The advertisement targeting process of claim 28 wherein said graphical program is a
2 web browser.

1 30. The advertisement targeting process of claim 19 wherein said query association
2 process includes a query parsing process for separating said query into one or more discrete
3 chunks.

1 31. The advertisement targeting process of claim 30 wherein said query association
2 process includes a word association process for associating one of said predefined
3 advertisement categories with one or more of said discrete chunks included in said query.

1 32. The advertisement targeting process of claim 30 wherein said query association
2 process includes a word categorization process for categorizing one or more of said discrete
3 chunks included in said query into one of said predefined advertisement categories if it is
4 determined that said one or more discrete chunks is not currently associated with any of said
5 predefined advertisement categories.

1 33. The advertisement targeting process of claim 32 wherein said query association
2 process includes a word recategorization process for recategorizing one or more of said
3 discrete chunks included in said query into a different predefined advertisement category if it
4 is determined that the existing association of said one or more discrete chunks with its
5 predefined advertisement category is no longer valid due to changes in the user's query
6 patterns.

1 34. An advertisement targeting process for determining the advertisement preferences of
2 a user, comprising:

3 a query monitoring process for monitoring queries entered by users;
4 a query association process for associating each said monitored query with
5 one or more predefined advertisement categories; and
6 a preference file maintenance process for maintaining, for each said user, an
7 advertisement preference file that specifies said predefined advertisement categories
8 associated with each said monitored query entered by said user, thus generating a list
9 of user-preferred advertisement categories;

10 wherein said preference file maintenance process includes a status
11 determination process for determining if an advertisement preference file exists for
12 said user.

1 35 The advertisement targeting process of claim 34 wherein said preference file
2 maintenance process includes a preference file creation process, responsive to said status
3 determination process, for creating said advertisement preference file for said user if it is
4 determined that an advertisement preference file does not exist for that user.

1 36. The advertisement targeting process of claim 35 wherein said preference file
2 maintenance process includes a user identification process, responsive to said preference file
3 creation process creating said advertisement preference file for said user, for transmitting to
4 said user a unique identifier that associates said user with the appropriate advertisement
5 preference file.

1 37. The advertisement targeting process of claim 36 wherein said unique identifier is a
2 cookie that is stored on a remote computer operated by said user.

1 38. The advertisement targeting process of claim 34 wherein said preference file
2 maintenance process includes a preference file modification process for modifying said list of

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- 3 user-preferred advertisement categories to include said predefined advertisement categories
- 4 associated with each said monitored query entered by said user.

1 39. An advertisement targeting process for determining the advertisement preferences of
2 a user, comprising:

3 a query monitoring process for monitoring queries entered by users;

4 a query association process for associating each said monitored query with
5 one or more predefined advertisement categories;

6 a preference file maintenance process for maintaining, for each said user, an
7 advertisement preference file that specifies said predefined advertisement categories
8 associated with each said monitored query entered by said user, thus generating a list
9 of user-preferred advertisement categories; and

10 an advertisement repository for storing a plurality of advertisements grouped
11 in accordance with said predefined advertisement categories.

1 40. The advertisement targeting process of claim 39 further including an advertisement
2 transmission process for accessing said plurality of advertisements stored on said
3 advertisement repository and transmitting, to said user, advertisements in accordance with
4 said list of user-preferred advertisement categories specified in said advertisement preference
5 file for that user.

1 41. The advertisement targeting process of claim 40 wherein said advertisement
2 repository and said advertisement transmission process are incorporated into a remote
3 advertisement service provider.

1 42. The advertisement targeting process of claim 40 wherein said advertisements
2 transmitted to said user are received by a remote computer operated by said user, wherein
3 said remote computer executes a graphical program that allows said user to view said
4 advertisements.

1 43. The advertisement targeting process of claim 42 wherein said graphical program is a
2 web browser.

1 44. An advertisement targeting process for determining the advertisement preferences of
2 a user, comprising:

3 a query monitoring process for monitoring queries entered by users;
4 a query association process for associating each said monitored query with
5 one or more predefined advertisement categories; and
6 a preference file maintenance process for maintaining, for each said user, an
7 advertisement preference file that specifies said predefined advertisement categories
8 associated with each said monitored query entered by said user, thus generating a list
9 of user-preferred advertisement categories;

10 wherein said query association process includes a query parsing process for
11 separating said query into one or more discrete chunks.

1 45. The advertisement targeting process of claim 44 wherein said query association
2 process includes a word association process for associating one of said predefined
3 advertisement categories with one or more of said discrete chunks included in said query.

1 46. The advertisement targeting process of claim 44 wherein said query association
2 process includes a word categorization process for categorizing one or more of said discrete
3 chunks included in said query into one of said predefined advertisement categories if it is
4 determined that said one or more discrete chunks is not currently associated with any of said
5 predefined advertisement categories.

1 47. The advertisement targeting process of claim 46 wherein said query association
2 process includes a word recategorization process for recategorizing one or more of said
3 discrete chunks included in said query into a different predefined advertisement category if it
4 is determined that the existing association of said one or more discrete chunks with its
5 predefined advertisement category is no longer valid due to changes in the user's query
6 patterns.

1 48. An advertisement targeting method for determining the advertisement preferences of
2 a user, comprising:

3 monitoring queries entered by users;
4 associating each monitored query with one or more predefined advertisement
5 categories; and

6 maintaining, for each user, an advertisement preference file that specifies the
7 predefined advertisement categories associated with each monitored query entered by
8 the user, thus generating a list of user-preferred advertisement categories.

1 49. The advertisement targeting method of claim 48 wherein maintaining an
2 advertisement preference file includes determining if an advertisement preference file exists
3 for that user.

1 50. The advertisement targeting method of claim 49 wherein maintaining an
2 advertisement preference file includes creating the advertisement preference file for the user
3 if it is determined that an advertisement preference file does not exist for that user.

1 51. The advertisement targeting method of claim 50 wherein maintaining an
2 advertisement preference file includes transmitting to the user a unique identifier that
3 associates the user with the appropriate advertisement preference file.

1 52. The advertisement targeting method of claim 49 wherein maintaining an
2 advertisement preference file includes modifying the list of user-preferred advertisement
3 categories to include the predefined advertisement categories associated with each monitored
4 query entered by the user.

1 53. The advertisement targeting method of claim 48 further including storing the
2 monitored queries in the advertisement preference file for later processing.

1 54. The advertisement targeting method of claim 48 further including storing a plurality
2 of advertisements grouped in accordance with the plurality of predefined advertisement
3 categories.

1 55. The advertisement targeting method of claim 54 further including accessing the
2 plurality of advertisements stored on the advertisement repository and transmitting, to the
3 user, advertisements in accordance with the list of user-preferred advertisement categories
4 specified in the advertisement preference file for that user.

1 56. The advertisement targeting method of claim 55 further including receiving, on a
2 remote computer operated by the user, the advertisements transmitted to the user, wherein the
3 remote computer executes a graphical program that allows the user to view the
4 advertisements.

1 57. The advertisement targeting method of claim 48 wherein associating each monitored
2 query includes separating the query into one or more discrete chunks.

1 58. The advertisement targeting method of claim 57 wherein associating each monitored
2 query includes associating one of the plurality of predefined advertisement categories with
3 one or more of the discrete chunks included in the query.

1 59. The advertisement targeting method of claim 57 wherein associating each monitored
2 query includes categorizing one or more of the discrete chunks included in the query into one
3 of the plurality of predefined advertisement categories if it is determined that the one or more
4 discrete chunks is not currently associated with any of the plurality of predefined
5 advertisement categories.

1 60. The advertisement targeting method of claim 59 wherein associating each monitored
2 query includes recategorizing one or more of the discrete chunks included in the query into a
3 different predefined advertisement category if it is determined that the existing association of

- 4 the one or more discrete chunks with its predefined advertisement category is no longer valid
- 5 due to changes in the user's query patterns.

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1 65. A processor and memory configured to:
2 monitor queries entered by users;
3 associate each monitored query with one or more predefined advertisement
4 categories; and
5 maintain, for each user, an advertisement preference file that specifies the
6 predefined advertisement categories associated with each monitored query entered by
7 the user, thus generating a list of user-preferred advertisement categories.

1 66. The processor and memory of claim 65 wherein said processor and memory are
2 incorporated into a personal computer.

1 67. The processor and memory of claim 65 wherein said processor and memory are
2 incorporated into a network server.

1 68. The processor and memory of claim 65 wherein said processor and memory are
2 incorporated into a single board computer.